

1     **We claim:**

2     1.     A method of inducing the regression of dermal tumors in humans which comprises the step of  
3     administering a bacterial product comprising heat-killed *P. acnes* bacteria selected from the group  
4     consisting of *Propionibacterium acnes*, *Propionibacterium avidum*, *Propionibacterium*  
5     *lymphophilum*, *Propionibacterium granulosum*, *Corynebacterium parvum* or *Arachnia*  
6     *propionica*.

7     2.     The method of claim 1 wherein the bacterial product that is administered comprises heat-killed  
8     *Propionibacterium acnes*

9     3.     The method of claim 1, wherein the method induces the regression of dermal tumors caused by  
10    the human papilloma virus.

11    4.     The method of claim 1, wherein the bacterial product further comprises an anesthetic.

12    5.     The method of claim 4, wherein the anesthetic is selected from the group consisting of  
13    aminoamides and aminoesters.

14    6.     The method of claim 4, wherein the anesthetic is lidocaine.

15    7.     The method of claim 1, wherein the bacterial product further comprises carriers and fillers.

16    8.     The method of claim 7, wherein the carriers are selected from the group consisting of sugars  
17    including but not limited to lactose, saccharose, mannitol, sorbitol, and cellulose preparations.

18    9.     The method of claim 7, wherein the carriers are selected from the group consisting of amino  
19    acids including but not limited to glycine.

20    10.    The method of claim 7, wherein the fillers are selected from the group consisting of starch  
21    pastes that use corn, wheat, rice or potato starch, gelatin, methylcellulose,  
22    hydroxypropylmethylcellulose, and sodium carboxymethylcellulose.

23    11.    The method of claim 1, wherein the bacteria are heat-killed by the process of heating the *P.*  
24    *acnes* in a water bath at 74 ° C to 90 ° C for 60 to 90 minutes.

- 1 12. The method of claim 1, wherein the bacterial product is suspended in a saline solution.
- 2 13. The method of claim 12, wherein the saline solution comprises sodium chloride in dI water.
- 3 14. The method of claim 12, wherein the saline solution comprises sodium chloride in a buffer.
- 4 15. The method of claim 14, wherein the buffer is selected from the group consisting of alkaline  
5 phosphates and alkaline citrates.
- 6 16. The method of claim 1, wherein the bacterial product is administered intralesionally.
- 7 17. The method of claim 1, wherein the bacterial product is administered subcutaneously.
- 8 18. The method of claim 1, wherein the bacterial product is administered preferably at .001 to 5 mg  
9 per dosage.
- 10 19. The method of claim 1, wherein the bacterial product is administered more preferably at .005 to  
11 2.5 mg per dosage.
- 12 20. The method of claim 1, wherein the bacterial product is administered most preferably at .01 to  
13 1 mg per dosage.
- 14 21. A method of treating viral infections of the respiratory tract in humans which comprises the step  
15 of administering a bacterial product comprising heat-killed *P. acnes* bacteria selected from the group  
16 consisting of *Propionibacterium acnes*, *Propionibacterium avidum*, *Propionibacterium*  
17 *lymphophilum*, *Propionibacterium granulosum*, *Corynebacterium parvum* or *Arachnia*  
18 *propionica*.
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- 19 22. The method of claim 21 wherein the bacterial product comprises heat-killed  
20 *Propionibacterium acnes*.
- 21 23. The method of claim 21, wherein the bacterial product further comprises carriers and fillers.
- 22 24. The method of claim 23, wherein the carriers are selected from the group consisting of sugars  
23 including but not limited to lactose, saccharose, mannitol, sorbitol, and cellulose preparations.

- 1 25. ~~The~~ method of claim 23, wherein the carriers are selected from the group consisting of amino  
2 acids including but not limited to glycine.
- 3 26. The method of claim 23, wherein the fillers are selected from the group consisting of starch  
4 pastes that use corn, wheat, rice or potato starch, gelatin, methylcellulose, hydroxypropylmethyl-  
5 cellulose, and sodium carboxymethylcellulose.
- 6 27. The method of claim 21, wherein the bacteria are heat-killed by the process of heating the *P.*  
7 *acnes* in a water bath at 74 °C to 90 °C for 60 to 90 minutes.
- 8 28. The method of claim 21, wherein the bacterial product is suspended in a saline solution.
- 9 29. The method of claim 28, wherein the saline solution comprises salts selected from the group  
10 consisting of alkaline phosphates and alkaline citrates.
- 11 30. The method of claim 21, wherein the bacterial product is administered orally.
- 12 31. The method of claim 21, where the bacterial product is administered with a natural flavoring or  
13 artificial flavoring.
- 14 32. The method of claim 21, wherein the bacterial product is administered preferably at .1 to 10 mg  
15 per dosage.
- 16 33. The method of claim 21, wherein the bacterial product is administered more preferably at 0.5 to  
17 5 mg per dosage.